

OCCUPANT SENSOR

Abstract

An oscillatory or pulsed first signal is operatively coupled to a first electrode placed between a conductive heating element and a seating region of a seat containing the heating element. A second signal substantially equal to the first signal is operatively coupled to a second electrode placed between the heating element and the first electrode. An occupant in the seat is sensed from a response to the first signal, responsive to which a safety restraint system may be controlled. In other embodiments, the second signal is operatively coupled to an electrode placed proximate to a side of the heating element away from the seating region of the seat, the second electrode comprises a sheath at least partially around at least a portion of the heating element, or the operative coupling of the first or second signals comprises AC coupling, for example, through an associated first or second capacitor.